

ACCESSIBILITY = BETTER USABILITY

**Tips, Tricks, and Best Practices for
Section 508 Compliance & WCAG 2.0**

EXPERIENCING (SOME) DISABILITY

WHAT “ACCESSIBILITY” REALLY MEANS

Section 508 may be a set of rules. But to *effectively* implement best practices, it's helpful to understand how to achieve true accessibility.

Rather than thinking about accessibility on the extreme ends of the spectrum, think about serving people **“in the middle.”**

PEOPLE “IN THE MIDDLE”

At one point in their lives, the “average” American may need access when they least expect it. Some don’t even consider themselves “disabled.” For example:

- a 20-something war vet returning from Afghanistan with mild hearing loss
- a 35 year-old who sprained her wrists after falling off her bike
- a 40-year old who is recovering from a temporary brain injury
- Someone who is shocked as they escaped the path of a tornado through their town and needs to access FEMA.gov.

SIMULATOR EXERCISES: HEARING LOSS

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As you listen to the following audio samples, see how the distorted image of Alan Alda provides a visual correlation to the importance of information in interpreting the world.



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TYPICAL WEB EXPERIENCE FOR ME, TODAY:

The screenshot shows the CNN homepage with a red header. The top navigation bar includes links for 'Home', 'Video', 'NewsPulse', and various news categories like 'U.S.', 'World', 'Politics', etc. A search bar is on the right. The main content area features a large video player for the story 'House OKs debt ceiling bill'. The video player has a progress bar at 00:12 and a 'Source: CNN' label. To the right of the video is a large advertisement for 'MAKE EVERYBODY'S BUSINESS... YOUR BUSINESS' with a 'JUST CLICK HERE' button. Below the video, there are sections for 'DEBT CRISIS: CNNMONEY' with a list of links, 'OTHER NEWS' with a list of links, and a 'FEATURED' section with three small video thumbnails. On the right side, there is a 'FRIENDS' ACTIVITY' section and a 'Most popular stories right now' section with a list of stories and progress bars.

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Home | Video | NewsPulse | U.S. | World | Politics | Justice | Entertainment | Tech | Health | Living | Travel | Opinion | IReport | Money | Sports

updated 10:37 p.m. EDT, Mon August 1, 2011

House OKs debt ceiling bill

Giffords casts first vote since shooting

The House backed a last-minute deal that would raise the debt ceiling and impose spending cuts. A Senate vote is set for Tuesday; approval is needed to avert a possible national default. [FULL STORY](#)

- Colleagues applaud Giffords' return
- Where it stands | Send message to D.C.
- Can they still raise taxes? Well ...
- Opinion: Blitzler | Frum | Cato fellow
- Boehner reacts | Gergen: GOP win

00:12

Source: CNN

MAKE EVERYBODY'S BUSINESS... YOUR BUSINESS JUST CLICK HERE

GO BEYOND BORDERS

ADVERTISMENT

Hi there! Log in | sign up

FRIENDS' ACTIVITY

NEWSPULSE

Most popular stories right now

- Woman dies in fall from Yosemite's Half Dome
- Missing girl's body found in river
- House passes debt ceiling agreement
- House applauds Giffords' surprise return

DEBT CRISIS: CNNMONEY

- CBO: Deal cuts \$2.1T | What's in it?
- Debt ceiling deal won't restart hiring
- A 'schizophrenic' day for stock market
- Students to feel pinch in debt deal

OTHER NEWS

- N.H. girl's body found in river
- Casey Anthony ordered back to Orlando
- FDA warns of fake morning-after pill
- Alcohol, anxiety a risky mix for some
- 'Exceptional drought' for chunk of U.S.
- Dem's 'Satan sandwich' raises brows

FEATURED

- Silver lining for tornado-torn town
- An asteroid ready for its closeup
- Explain it to me: Ramadan

- lots of video
- no captions available
- exclusive video, no transcript

SIMULATOR EXERCISES: LOW VISION

Put on the low-vision simulator goggles and go to:

www.ready.gov

List the top 5 essential items you need in your Basic
Emergency Supply Kit

THE RULES & BEST PRACTICES

WHAT IS SECTION 508?

Section 508 means that Electronic and Information Technology developed, maintained, procured, or used by the Federal Government must be made accessible to people with disabilities, including Federal employees *and* members of the public.

WCAG = WEB CONTENT ACCESSIBILITY GUIDELINES

Widely adopted best practices that all organizations can use, especially when they do not need to comply to Section 508.

Most often, these guidelines improve on the 508 compliance.

WHO NEEDS TO COMPLY TO SECTION 508?

- Federal Agencies
- State and local governments most often apply, as they receive federal funding that stimulates compliance to Section 508.
- Businesses who provide goods and services to the federal government

WHO NEEDS TO (ALSO) FOLLOW WCAG?

- Anyone seeking to bring greater usability and experience to a site.



INTERESTING STAT:

Accessibility when considered in the beginning of a project
adds **10%** of time & cost.

After the fact, it's at least **2x** the cost.



ON THAT NOTE...

When accessibility is addressed in the beginning,
Usability improvements and considerations are
weaved into the process.

WHERE & HOW TO START

CONTEXT

Context plays a larger role than we expect. Well-described information about content on a web-page is not only helpful for all types of disabilities, but also makes the page **more searchable**, **user-friendly**, and **understood**.

Examples of Podcasts from NPR.org

How to NOT do it:

Show: Wait, Wait...Don't Tell Me (NPR)

Title: Who's Carl This Time?

Description: Carl reads three quotes from the week's news: European Vacation, RSVP'ing the Grand Old Opry, and Rapture Redo

How to do it:

Show: How Stuff Works

Title: How Igloos Work

Description: Igloos were created by Inuit Indians as temporary houses to use on fishing and hunting expeditions. Learn about igloos and find out how to construct an igloo.



ACCESSIBILITY KEY CHARACTERISTICS

Blindness / Low Vision

- Skip Navigation Links available;
- <alt> text available and effective;
- Contrast options & control;
- Provide long descriptions for complex images

Deafness / Hearing Loss

- Closed captioning available;
- Transcripts of audio / video available;

Cognition / Intellectual Disabilities

- Provide both images and text;
- Ensure site is user-friendly & understandable
- Avoid overly complex web functions
- Avoid jargon. User basic language.

Mobility

- Provide skip-navigation links;
- All website functions available from keyboard;
- Ensure pages are “error-tolerant.”

APPLICATIONS FOR USABILITY

CASE STUDIES FOR GOOD ACCESSIBILITY & USABILITY

The screenshot shows the White House website's video player interface. The header includes the White House logo and navigation links. The video player displays a scene of President Obama signing a bill, with a large play button overlay. The video title is "President Obama Signs 21st Century Communications & Video Accessibility Act". The video player includes a progress bar, a volume control icon, and a "Share | Embed" link.

the WHITE HOUSE PRESIDENT BARACK OBAMA

★★★★ THE WHITE HOUSE WASHINGTON ★★★★★

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BLOG PHOTOS & VIDEO BRIEFING ROOM ISSUES the ADMINISTRATION the WHITE HOUSE our GOVERNMENT

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President Obama Signs 21st Century Communications & Video Accessibility Act

October 08, 2010 | 9:24 | Public Domain

The President signs the Twenty-First Century Communications and Video Accessibility Act of 2010 into law, explaining and deliver brief remarks on the Impact of this law on people with disabilities.

Download [mp4](#) (90MB) | [mp3](#) (9MB)

[Read the Transcript](#)

We're so proud of the legislation I'm signing today.

00:21 09:24 CC Share | Embed

What's Right:

- Descriptive context;
- Closed captioning available;
- Transcript available;
- Audio-only version;
- User can enlarge video;
- Easy control of play-back;
- Clear navigation direction



HOW TO WRITE AN EFFECTIVE ALT TEXT

Structure of an Effective ALT Text

There is not an exact science to writing an ALT Text description. Follow the guidelines below and add a little bit of creativity.

A good ALT text is:

- **Succinct.** 1-2 sentences. No longer than 125 characters. If it needs to be longer, such as to describe a complex image, a long description <longdesc> can be used.
- **Descriptive.** The context and the description of the image are aligned. The *function* of the image is reflected as well.
 - For this reason, alt-text descriptions for images used in other context *does not always apply in another context.*
- **Unique.** The alt-text does not repeat the title, nor does it include the words "Photo of....", "Image of....to describe the image.
- **Creative.** The visitor can visualize the image without seeing it, and effectively understands why the image was used and the mood it conveys to the content.



HOW TO WRITE AN EFFECTIVE ALT TEXT



| INEFFECTIVE | EFFECTIVE |
|---|--|
| alt = "Image of Emergency Preparedness Kit" | alt = "Contents such as water bottles, band-aids, flashlights, and a poncho are laid out as part of an Emergency Preparedness Kit." |
| <p>Why it doesn't work:</p> <p>Text, "Image" is redundant because the screen reader already announces that there is an image.</p> <p>There isn't any information about the kit. It can mean a number of things, so a further description is necessary.</p> | <p>Why it works:</p> <p>There is an understanding that an Emergency Preparedness Kit is an important thing to have by the association of batteries and bottled water.</p> <p>Use of "laid out" illustrates that they are in plain view - elevating its importance - not just packed up in a bag. It gives spatial awareness to the contents and size.</p> |

HOW TO GET A VIDEO CAPTIONED

HOW TO MAKE “READ MORE” LINKS MORE ACCESSIBLE

HOW TO TEST FOR ACCESSIBILITY & USABILITY

WRAP UP & SUMMARY

- **Context is key.** Provide multiple ways for people to access and interpret content.
- An automatic accessibility checker cannot make sense of an <alt> tag. You need to manually check and provide description of an image **succinctly** and **accurately**.
- It's also about serving people **"in the middle"** of the ability spectrum; especially those who **do not consider themselves to have a disability**.
- Section 508 are just baseline rules. Go **beyond the basics** and weave best practices into the site.
- Testing tools are available as toolbar plugins, or as full website checkers. **Humans, though, are the best checkers.**

QUESTIONS?

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